

ENGINEERING HERITAGE AUSTRALIA

ORAL HISTORY PROJECT

TRANSCRIPT OF INTERVIEW WITH

JIM PATON



Photo by M Taylor – 25 May 2020

Interviewer	Mike Taylor
Transcriber	Mary Macfarlan History Development Pty Ltd
Date of Interview	19 June 2019
Duration	124 minutes
Transcript	1 July 2020

NOTES TO THE READER ON INTERPRETATION OF THIS TRANSCRIPT

Readers of this oral history transcript need to be aware that it has been edited to meet the requirements of the interviewee and though most of it is a near verbatim transcript of the words as spoken during the interview, there is some variation. The interview was conducted in the form of a natural conversation between the interviewer and the person being interviewed and the changes have been made to facilitate the flow of the document.

Much of what is said in such interviews relies upon the accuracy of the memory of the person being interviewed and readers should bear this in mind and judge for themselves how factually accurate the material is. The interviewer has sought to clarify or verify facts and statements made during the interview where this seemed appropriate.

The views and opinions expressed within the transcript are those of the person expressing them in the interview.

Please refer to the notes on the following page to aid interpretation of the transcript.

Note 1

The recording runs for a total of 124 minutes

Note 2

Where the interviewer has used words such as 'Yes', 'Right' or 'OK' as an encouragement, but not as anything else then these words have not been transcribed unless they are relevant for the context. Commonly used habitual phrases have also been deleted from the transcript where appropriate.

Note 3

The interviewer has inserted occasional words (which are not in the original recording) into the transcript in order to clarify the context of what was being said. These words are shown in the form [they would say].

Note 4

Where a sentence has a series of dots in the text such as this indicates that the speaker paused, the recording was not clear enough to transcribe accurately what was said or the following speaker interrupted what was being said.

Note 5

The interviewer is referred to as 'MT' in the transcript and to the subject speaker is referred to as 'JP' as appropriate.

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INTERVIEW TRANSCRIPT

Speaker	Topic
MT	This is Mike Taylor and Jim Paton and it's Wednesday the nineteenth of June. We are talking about WA engineering history and then we're going to talk about Engineering Heritage WA in particular. Before we started the recording, you were saying that there were three consultants in Perth in the early days.
JP	In the early days, around about nineteen fifty, there were Don Fraser, Leon Halpern and Gordon Barratt Hill. They were all structural engineers. Gordon's background was he attended Scotch College where he was a brilliant athlete. He won the mile in the school sports, he stroked the winning Head of the River crew. Gordon was a winner of a government exhibition for his Leaving Certificate at age fourteen but had to stay behind because he was too young to go to university. When he went to University, he might have done his Leaving a few times. At university he became President of the Guild of Undergraduates. He got his degree in nineteen forty and then joined the army. He got a Rhodes Scholarship before he joined the army. When he came back in nineteen forty six he went to Oxford to take up his Rhodes Scholarship and got a PhD in structural engineering.
MT	Wow.

[Copies of items from the internet relating to G B Hill are below]

Daily News (Perth, WA : 1882 - 1950), Saturday 23 December 1939,

Mr. G. B. Hill Is Rhodes Scholar

Mr. Gordon Barrett Hill has been selected as West Australian Rhodes Scholar for 1940.

At Scotch College, where Mr. Hill obtained his early education, he was captain of the college for two years.

He was one of the most brilliant all-round boys the school has produced. He was dux of every class of which he was a member, and dux of the school in 1932, when he was only 16.

Mr. Hill entered the University of Western Australia in 1936 and has now completed four years of the course for the degree of Bachelor of Engineering.

His major subject will be structural engineering.

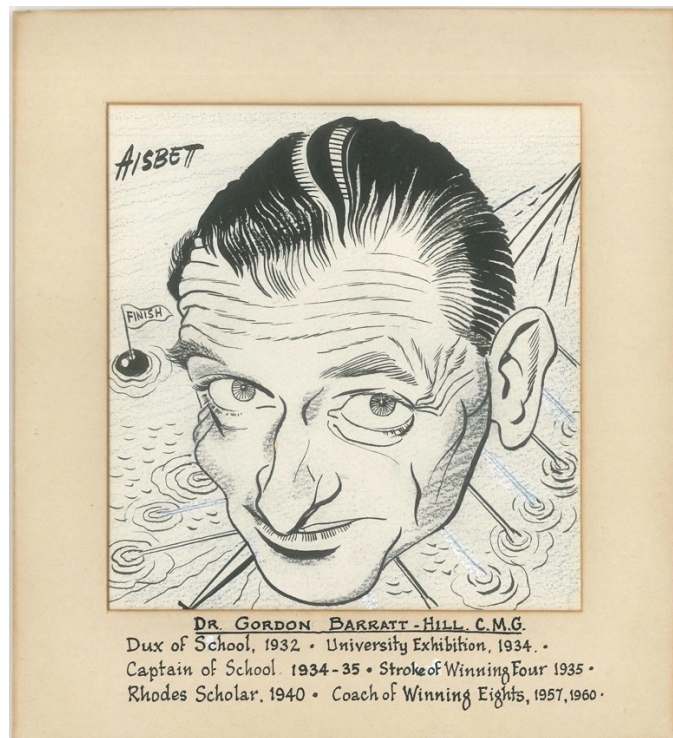
Mr. Hill passed seven of his subjects with distinction and obtained major passes in twelve subjects.

Because of the war, it is uncertain whether Mr. Hill will be able to go to Oxford next year.

If permitted, he proposes to study structural engineering under Professor Southwell, and will follow a course in structures and architecture.

He is particularly interested in the relationship of the two subjects and would like to carry out some work on Australian timbers.

from Trove



from Scotch College archives

JP	He came back in I think nineteen fifty and initially he was a lecturer at the University of WA under Professor Blakey. He then went into consulting forming his own practice G B Hill & Partners. Very much involved with structural engineering. He did the AMP Building, the Westpac Building on the
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	corner of Murray and St Georges Terrace; the T&G Building on the corner of Barrack Street and the National Bank building; he did all the high-rise buildings.
MT	At the time the T & G was the tallest in Perth, wasn't it?
JP	Yeah. The T & G was unique in that it was a steel-frame buildingand it was unique in that I think its steel came fromin my biography I mentioned I worked for Structural Engineering at Welshpooland I think the steel in the T & G Building came from Structural Engineering Welshpool. Structural Engineering was set up in the nineteen thirties to build the GPO in Forest Place and the Commonwealth Bank Building. It was half-owned by BHP and half-owned by Elder Smith Goldsborough Mort. That's where I worked for a few years on graduation.
MT	Yeah
JP	I mention Gordon because he then took on a partner Bruce Nelson and then me in later years. The firm expanded into civil engineering as well as structural engineering. But Gordon was unique in as much in the same year he was Chairman/President, or whatever you call it now, of the West Australian Division of Engineers Australia, he was also Australian President of the Consulting Engineers Association.
MT	Yeah, they were called ACEA at the time.

*Note: [ACEA History records G. B. Hill as President 1970 to 1972]
[IEWA Honour Board records G. B. Hill as Chairman in 1971]
[G. B. Hill was also Chairman of the ACEA WA Chapter 1965/67]*

JP	Yes, yes. I think he used to attend the international group called FIDIC [International Federation of Consulting Engineers], but to be Chairman of the local Division and President of the ACEA would have made a very busy year. There was an obituary of Gordon in the West Australian Newspaper. I haven't got the date, but I've tried to remember when he died, it would have been late nineteen eighties or early nineteen nineties.
MT	We'll have to go look for that. The other consulting firm that I remember around the 1970s, they were just down the road from the PWD in Dumas House, was Halpern, Glick and Lewis. So I guess they were the other big consulting firm in Perth.
JP	Yes, Leon Halpern and John Lewis. You know the story of Johnhe left the PWDa number of reasons, I don't know whether you know one of the reasons?
MT	He had some ideas that the hierarchy at the time didn't want to go with?
JP	He was always very much Involved. I worked with John when I was doing the design for the dams at Serpentine. John was with the PWDhe had done a course at Imperial College, where I went a few years later, in geotechnical work with the doyen of British Geotechnical engineers, the Bishop and the Archbishop they were called. Professors Bishop and Kemp were two well-known professors at Imperial College. We needed to set up a geotechnical laboratory to test all the Serpentine materials and I set up the PWD geotechnical laboratory at the back of the old Barracks. I set that up with John. Later it moved out to Herdsman. It was the forerunner of

MT	The Engineering Research Station
JP	Engineering Research Station yes. So I knew John quite well, but I think the Director of the Public Works Sir John Parker was pushing John Lewis too hard. You know John Lewis worked on the Ord River Dam, and particularly the Diversion Dam.
MT	When we had a ceremony up there to celebrate fifty years, John came to that ceremony and we have photographs of John [Lewis] back at the Diversion Dam.
JP	Well, John did his thesis at Imperial College. It was on the design of rock fill dams....and I think he designed the main Ord River dam....so he knew a lot about north west and he was pushing hydro tidal power up there.
MT	Oh yes
JPand he worked a schemeone of the inlets up there; and he was trying to get the Director to move on that and it didn't happen,so John went public.
MT	Oh right.
JPand I don't know whether you knew Sir John Parker, you probably did.
MT	Very briefly. I have this enduring image as a young cadet engineer arriving and being shown around. There was the special office area, the only carpeted area in the building, special high doors and in the far corner was Parker's office [in the prime South East corner overlooking Kings park and the river]. It was quite imperial for a young engineer.
JP	Sir John Parker, before he worked for the Public Works, was a construction engineer with the Water Supply Department, where I also worked after Structural Engineering. John Parker introduced dewatering spears for sewer construction. A very forthright gentleman in every sense. So I think [it was the issue with] John [Parker] that initiated the move of John [Lewis] to join consultants Halpern & Glick.
MT	Reminds me that we [EHWA] must do a little bit more work on the early consulting firms in Perth.
JP	Well I assume that's what Peter Blockley was doing in asking for details about myself. I don't know whether he got anybody to do anything about Gordon Barratt Hill
MT	One of the things we will do is we'll find that obituary in the West Australian and we can make sure that at least that information is available in our biographies.
JP	Not every consultant was that prominent in Engineers Australia or the Institution of Engineers, but Gordon is unique in that he came through Engineers Australiato become the Division Chairman.....and he also came through with the Australian Consulting Association. Of the three consultants, Don Fraser to my knowledge had no involvement with Engineers Australia and I don't know how much John Lewis had either. Another exception is Ian Steel of Merz McLellan.
MT	One of the things that's very helpful with these [oral histories] is that at the end of them we put a list of awards or publications. Did you ever publish any papers? If it's a help, the Engineers Australia website has a page where we can type in a name and look up a list of papers.

JP	I did a thesis at Imperial College; and I also presented a paper at the Heritage Conference at Ballarat on the guns at Rottne Island, the Oliver Hill battery.
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[the paper is titled 'Oliver Hill Coastal Artillery Battery, Rottne Island' and was presented to the 9th National Conference on Engineering Heritage, 15th to 18th March 1998. Copy available on Engineers Australia 'informit' at <https://search.informit.com.au/documentSummary;dn=545889566164651;res=IELENG>, free if an EA member and logged in.]

MT	Yeah?
JP	I delivered a paper at the conference here in Perth.
MT	Was that the seventy nine conference was it?
JP	No, the Heritage Conference held in Perth.in 2007 I think, on the history of tramways in the development of Perth.

[the paper is titled 'Perth's Tramways & Trolley Buses' and was presented to the 14th National Engineering Heritage Conference on Tuesday 20th November 2007. Copy yet to be located.]

MT	Yep.
JP	But that would be about it.
MT	OK. We can chase those up and try and find them because in the past there's been so much good work done, but these days everyone uses the internet to find things. Unless we can put them in a spot where the internet can find them, nobody finds them anymore. One of the things we're going to do with this WA Engineering Heritage site, is all these old papers on WA, [ensure that] they're findable. There's lots of them that are around in digital copies already or they can be scanned into digital copies; and we're going to make sure people can find them again.
JP	I might have a copy ofif you can't because they're fairly voluminous, I'll come back to you.
MT	I've been collecting a lot of the conference papers. I've got about half of the conferences that were held in Australia.
JP	OK. You have the pre-prints of the papers that I delivered.
MT	I'll check on those and if we've got a problem we'll get back.
JP	I assume they made the pre-prints. We digress a bit here, you really came here to talk about the start of Engineering Heritage
MT	Nothing wrong with a bit of digression
JP	You know a couple of years beforehand who the next Division Chairman is going to be. It turned out that the year I was to be President was nineteen seventy nine, Western Australia's one hundred and fiftieth (150). We also found out that it was the diamond jubilee anniversary for the formation of Engineers Australia. So I had to set up a committee and we went chasing a [copy of the] Royal Charter because the Institution found out it was also a significant year for the formation of the Institution. It became a bit high powered, so we sent for a copy of the Royal Charter that we could display at the conference. They couldn't find it, had no idea where it was, which was indicative of what archival records were like in our governing body for Engineers....Institution of Engineers. So aftereventually they did find it in some nook and cranny somewhere. But we also found out that when they shifted fromthis is Engineers Australia from the Sydney officeto

	Canberra, they were going through to clean out their office and that's when they found the filming of the construction of the Sydney Harbour Bridge. I don't know whether you've seen the video of the construction?
MT	There was a series, the Sydney Harbour Bridge, the pipeline and the telegraph line to Darwin. They were one hour TV programs.

[The series is called Constructing Australia. They were produced by Film Australia in 2007 and shown on the ABC. They are now available on YouTube at <https://www.youtube.com/watch?v=gfZjMQDec4o>]

JP	We asked for the original films to come over for the seventy nine conference because it was such a significant conference for the State and the Institution. We were trying to get publicity. There were reels and reels of them....what you see on television originally came from the conference because we made them available. It was a bit disappointing they only showed excerpts but the Institution then under I think it was Don Fraser, a very active heritage engineer in the Sydney Division, he arranged to get an edited version of the Sydney Harbour Bridge. Have you seen it?
MT	I've seen the ABC version, I haven't seen the original.
JP	I assume the original is with the National Film Archive. On that score I was watching SBS program on television last night about the Australian Film Archive in Canberra and how they have got to bring it up to date otherwise!
MT	Could be lost.
JP	Coming back to where I was, I had to set up a committee and call for papers. I'd structured the conference, it was centred around resource and environmental, so we had the papers set so that attendees interested in a particular area could go to those [streams]. They couldn't see every paper, so it was structured. It was the first time a conference had been done that way. A couple of years later I did the Water and Wastewater conference that was held over here in the same way for Barry Sanders and Don Montgomery of the Water Corporation. But I had to set up somebody to handle the opening ceremony for Engineers Australia's 1979 conference, we had to book the Sheraton Hotel for the venue; the Concert hall for the opening ceremony; and State tours for engineers who came a week earlier. It was quite a business. Because it was the State's 150 th we looked at a history of the Division...but we thought it was too much in the time available, so we set on doing an extensive photographic display of past engineering at the Perth Concert Hall.
MT	You mentioned here all the photographs that were displayed.
JP	I hate to think how many [photographs] there were, but it covered the walls of the foyer. Out the front of the Concert Hall we got a section of CY O'Connor's pipe, a section of the old wood stave pipe which was used in the thirties; and we had other displays out the front facing St George's Terrace. So that's where my heritage [interest] started.
MT	Yes
JP	At the same time I was a member of the National Trust. The National Trust brought over a lady called Judy Birmingham who ran the only industrial archaeological course in Australia at Sydney university. She did a conservation management plan on the Yarloop Timber Mill because it was destined for complete destruction. She got in there just in time and she managed to get

	preservation as you know. It's since burnt down of course.the tools, the equipment, everything. It was a complete timber mill and represented probably a hundred or a hundred and fifty years of timber milling.
MT	Yes
JP	It was saved by her conservation management plan and she came over a few times to coordinate the restoration. As you know it was worked up as an operating [tourist attraction]. It came to our Heritage Committee to get somebody to certify the boilers as being safe and our Heritage Committee members helped with that.
MT	Yes.
JP	The National Trust was of the view that they were concentrating on homes. Things industrial were also important and were not being covered. They suggested I attend a seminar in ...well it was a week-long conference in Goulburn run by the National Trust, chaired by Judy Birmingham, specifically on industrial archaeology. Quite interesting to hear Judy Birmingham's comments on the lack of research that architects do. She took us out to Hume, the explorer's restored house, to demonstrate how bad was the research on which the restoration was based.
MT	Yes
JP	...his house was in Goulburn and she took us out to show how it had been restored. Then she went through what had been restored in the architect's opinion. Not only the newspaper and documentary research, but around the site they'd used different materials and all this sort of stuff. It was quite an interesting conference.
MT	Ralph Moore has told me the same thing. He says it was the collective idea and focus from the seventy nine conference which was crucial in developing Engineering Heritage panels.
JP	Well we were getting feedback from the National Trust, from Margaret Fielman (who really founded the WA National Trust), that there was a void in heritage. [There was a need to cover industry as well as buildings]
MT	So in seventy nine were there any other Engineering Heritage groups anywhere else in Australia?
JP	Oh yes. Denis Cumming. Denis was in the Department of Civil Engineering at Adelaide University and he was an English chap [who] had come out to Australia.
MT	Yes, so to help with that, we've actually found out a lot about Denis. We've been in contact with his daughter and with the help of the family we've just written a biography of Denis. His daughter has sent me a list of all his awards and publications; and we now have a photo of Denis. Well aware of Denis's history in South Australia and then he came across to West Australia and did a tremendous amount of work. Was Denis Cumming at that seventy nine conference?
JP	Yes. Being the designate Chairman of the seventy nine conference, I went to the previous conference. Denis gave a paper at the seventy eight conference in Melbourne on Engineering Heritage which is really industrial archaeology, it's the same thing.

MT	Yes. He gave a paper at an Environmental Engineering Conference in Canberra in June of seventy nine. We've got a copy of that, it's probably the same paper that you're referring to, it's Australia's Engineering Heritage and he looks at all sorts of things and we've got a copy of that paper.
JP	No, my interest in Heritage comes from the seventy nine conference I specifically went along to Denis's paper at the nineteen seventy eight conference in Melbourne.
MT	Right, I need to find one in seventy eight. Denis also produced this book titled 'They built South Australia'. It has a whole lot of biographies in the back half of it and we're actually using that as a bit of the model for what we're trying to do here in WA. The other thing is that when Denis died all of his papers.....we think it was particularly Bruce James and some others who collated his papers; and they're all in the State Library. Denis actually started doing a history of engineering in WA. We've got a copy of all Denis's papers, so we've been lucky to get some of his work.
JP	And what about his history of timber structures in Western Australia.
MT	Yes, we've got that four-volume set plus a set of railway plans.
JP	Enormous..... which is now the reference to all timber structures
MT	You'll be glad to hear there are copies in libraries, they're in the Royal WA Historical Society library at Nedlands.
JP	I've been a member of the Royal West Australian Historical Society, I think for forty years.
MT	I'm a newcomer. Going back to that seventy nine conference?
JP	Well Denis was there, but on the paper that I went along to in Melbourne in seventy eight, he was pushing the federal office of Engineers Australia to get into Heritage. The National Trust had ...nationally had been set up but there was....it wasn't filtering through as I understand it. The paper he gave was significant and he was saying how if you do your documentation right, there are funds available to assist with the documentation and the restoration which was particularly important. Also at that conference was Ken Webster. He was the designate Chairperson for the WA Division after me [in 1980]. So setting the committee, I had Phil Harvey, he did the opening ceremony and Ralph [Moore] was doing the tours. I was doing papers with Ken's help. Because I had an interest in heritage, I asked each of the people I'd delegated to run the conference what can we do about Heritage. That's where we started looking at what we can do. Stan Novak from Curtin University then took on the task ofand Ken and I sort of helped....Ken was pretty busy at the time and then Stan did the photographic exhibition. Copied the photos using his students from Curtin University and stuff like that.
MT	One of the things we found in the boardroom at the Division office is a whole lot of display photographs.
JP	What I'm trying to weave is a story around the significance of the sesquicentennial in relation to the Institution. We did the conference and afterwards we had to take down the photography and stuff like that. I don't know what happened to the actual black and photographs, but I do have a lot of slides ofthey're in thirty five millimetre slides.
MT	They're easily digitised.

JP	It was a unique [conference]. There was a large attendance of 1,400 and the conference was opened by the Governor General Sir Zelman Cowen.
MT	There were a whole lot of photo boards in the Board room for many, many years and I don't know where they come from. Some of them I know come from a display that was put up in Kalgoorlie. There's Richard Hartley's notes about a display in Kalgoorlie. When you look at them, there were several series of different boards from different times, so they might even go back to the seventy nine conference.
JP	I think the ones in Kalgoorlie would have been done by a well known lecturer at the Kalgoorlie School of Mines, I can't remember his name, but he saw what was happening to the deep mines up there, so he did a complete photographic record of all the headframes in the mines in Kalgoorlie. I think a lot of the photography that you mention of Kalgoorlie would have been from his photography. These may be held by the WA National Trust.
MT	Right yeah
JP	I remember we got him to deliver a paper at one of the evening presentations. I always remember him saying he went into the office of Western Mining, I think it was; and he said the roof had blown off, the walls had fallen down and there was all this documentation there. He was enthusiastic about heritage preservation, whether he was an engineer or not I'll try to remember his name.
MT	Going back to the seventy nine conference, at that time there was another group in South Australia around Cumming. That was pretty well the only one in Australia, was it?
JP	No, there were other ones forming up in Sydney, Melbourne, Brisbane, Canberra, Newcastle and Tasmania. Again many of the first members were Englishmen. I mention that because I've noted down through the years the interest that engineers from England coming to Australia such as Tony Moulds have in heritage.
MT	Well particularly if they've come from the Newcomen Society.
JP	The faculty of Mining Engineering was centred in Queensland under a professor who was also starting to take an interest. His name was Ray Whitmore. There was also a Professor of Chemistry at Newcastle.
MT	Yes. I've seen a little bit of material that says it's Whitmore who really promoted the formation of Engineering Heritage Australia with Denis's push and assistance.
JP	I think Cumming was ahead of Whitmore. There's another one, Don Fraser who's a railway engineer in Sydney. He was doing a lot of work on bridges and he became very enthusiastic. There was another chap in Tasmania who was concentrating on convict stone-arch bridges there was another engineer in Victoria.
MT	OK, they made connections.
JP	From my point of view, after the seventy nine conference.....I didn't want to let it lapse so I formed a specific Heritage Committee. I wrote to all engineering related companies and departments in Western Australia to put forward a representative for an Engineers Australia WA Division Heritage Committee. Now I don't know whether you want me to go through who they were?

MT	We don't know who they are at the moment because we don't have any minutes. So this would have been in nineteen eighty after the conference.
JP	We had a retrospective on the conference, reconvened the committee and went through things again. I took on the Chairmanship of the Heritage Committee and wrote out to get these representatives. They came in at different times, but it was Bill Larke from Westrail, a chap called Maurice Morley from Westrail. From Telstra I've got John Moynihan, he wrote ' <i>All the News in a Flash</i> '. Ralph Moore from Main Roads. Ken Webster from the PWD. Stan Novak from Curtin. They were all nominated by their respective organisation. There was Lloyd Margetts who came on board. From UWA was Ron Johnson.
MT	So the first meetings would have been in early nineteen eighty.
JP	People like Stan Novak was getting information from the photography from a variety of sources, so you might say early nineteen seventy eight (1978). Now Denis's marriage broke up and his new partner and he came over to Western Australia.
MT	So that's why Denis came to Western Australia
JP	Now when was the PWD and Metropolitan Water Authority merged.
MT	July the first, nineteen eighty five. I remember it well.
JP	I bet you do. There was also Ron Strickland who was concerned with plans being lost. When we heard about [the merger], our Heritage Committee wrote to Bob Hillman who was the Director of Engineering suggesting that a history of the Public Works Department should be compiled.
MT	Oh fantastic
JP	We think it was that letter that helped him to get ministerial approval. So John Le Page attended a few meetings but that would have been probably in eighty four prior to the actual merger.
MT	I remember John, I have a copy of his book. You can still actually buy them the Historical Society.
JP	Well it's very [comprehensive]. He was very thorough. He did it so well
MT	It's excellent. He had so much information available to him, he was in a unique position at the time. It was fantastic that Bob Hillman got him to do it.
JP	Well, I had a lot to do with John because I was running the design equivalent of John Le Page when I came back from Serpentine. I was running the equivalent in the Metropolitan Water Authority, all in the same building. We were sharing a lot of facilities, even had to share the first photocopy machine. I was pushing to wire up Dumas House for computers. We actually got Dumas House wired up. Then the powers that be, the Government, decided that their expert had to be from the Public Service area. That chap, I think he'd been in the air force and had a dabbling in computers, brought in the National Cash Register people, which of course had no technical programs, that's when I left the Metropolitan Water Authority to become a partner in G. B. Hill and Partners.
MT	Now let's go back to the beginnings of Engineering Heritage West Australia. You've told me about the original members. At that time did Engineering Heritage Australia exist, was there a national committee or were there just the state bodies in South Australia and Queensland.
JP	There was a Heritage Committee in WA. I forget the terminology, I think it was called a group or something like that. It was out on the sidelines....no

	college or anything like that; and there was also no Heritage Act in Western Australia.
MT	So the national body, can you remember who might have been the Chair of the national body at the time?
JP	Oh gosh, I should. I went along to so many meetings. I attended early national group meetings, I think in Canberra, and I remember Denis Cumming (SA), John Muirhead (NSW) and members from Vic, Tas, Newcastle and Canberra. The WA 1979 150 th was a busy year and as WA president many functions to attend. Ken Webster attended national group meetings. Not much happened in 1979 and I chaired the WA Group. Subsequently the National panel was formed and biannual heritage conferences commenced. The first was in Brisbane in 1982. I think Whitmore became involved at this time.
MT	So you went to quite a few of these at that time. You personally had to travel across to Canberra to go to the meetings or did they have them in Melbourne or Sydney or something.
JP	Well sometimes they were held in Adelaide and sometimes they were held in Canberra. I was on the Council of the federal body.
MT	So you'd have the meetings associated with the Council.
JP	Not necessarily, but frequently try and combine the two. Certainly Denis Cumming would have been there. Whitmore attended, yes it was a group. I could look into that.
MT	No, that's alright, the focus is on the West Australian Committee.
JP	Look, what happened was I had moved into the academic area of Heritage by going through that seminar in Goulburn where the Burra Charter, which was based on the international ICOMOS, was heavily discussed. The only way you can preserve, ensure that conservation occurs, was through a conservation and management plan. So in my time of about six years and during later years on the Committee it was my objective, there was no plaquing being done then, was to prepare conservation and management plans. When they started, I got registered with the Heritage Council. The first one I did was the Maylands Brick Works.

Note: Heritage Council of Western Australia commenced in 1990. Before this there was a State Heritage Committee.

MT	Oh yes
JP	It was going to be demolished. It was owned by Metropolitan Brick Company and was to be transferred to the City of Stirling. The National Trust approached me, would I join with them in approaching the City of Stirling. The contract that was signed with the City of Stirling was that the Metropolitan Brick Company would demolish the Maylands Brick Works. So we negotiated with the City of Stirling and they agreed to waive the demolition of the Maylands Brick Works. We were then managed to get money for a conservation management plan. As a result of which, we got money to make sure the place wasn't going to fall down. The kilns were in a terrible state. We were organising continual maintenance. We couldn't preserve all the drying sheds at Maylands, but bearing in mind [there was a lot of community support] as the

	Maylands Brick Works had a network through the Maylands community because it was a prime source of employment for so many people.
MT	Who lived in the area
JP	So we carried out maintenance for two or three years following our conservation management plan. Then we got half a million dollars from the government to restore it, which we did. We put up the fences, we could only preserve a section of the drying sheds. Originally everything was done manually, although they did have a rail network where they pushed trolleys around. We managed to get the last manager of the Metropolitan Brick Company, Alf Whittaker [an engineer (UWA)], to help preserve the extrusion machinery. We conserved the chimney stack. So that was the first one I did and of course it was preserved because we put it on the Heritage Council list when it was formed.
MT	In the early days other activities that you mentioned were support for the book by Harold Hunt, Bunbury Wheat Silos, Oliver Hill battery, All the News in a Flash by John Moynihan, Perth's Early Water Supplies by Harold Hunt and so on. The committee in its early days saw that it wasn't just heritage, it was history as well. When I first joined the committee, I was struck by the fact that there was such a focus on heritage. I'm more interested in history personally, yet I notice that your committee was just as concerned with engineering history as it was with engineering heritage. I didn't realise that you had promoted News in a Flash and you'd promoted Harold Hunt and the John Le Page books.
JP	We approached Telstra. Histories are done generally in an honorary way by the authors. The big cost is the printing. Rightfully the author should also be paid but it doesn't work that way. We approached Telstra to fund the printing of 'All of News in a Flash'. Before he retired the chap in charge of Telstra in Western Australia allocated three or four thousand dollars to the printing of John Moynihan's book. As far as Harold was concerned, I got to know Harold very well when I was in the Metropolitan Water Authority, he was Chief Engineer. I approached Harold at his retirement function. I said to Harold, what about writing a history of metropolitan water supply. He said he would and then he concentrated on Perth's early water supplies.
MT	So the learning for the committee now is that you really have to go looking for opportunities. The Engineering Heritage Committee was quite important in promoting ideas in getting these things to happen.
JP	You had to use historians. Like John Le Page, Harold did an excellent job as a historian.
MT	I notice it was published through the Institution of Engineers.
JP	We got money for Harold from the West Australian Heritage Committee.
MT	The other really big one of course is the four volumes on timber structures in West Australia.
JP	Before we go on to that, you've probably come across Dr Gill.
MT	No
JP	Andrew Gill
MT	No I don't know him at all.
JP	He works very strongly in the heritage area. At that time he was spotting in on heritage, but he was writing short histories and things. I approached him to do a

	history of the Goldfields pipeline. We got funding for him and Andrew grabbed the librarian from the Public Works Department and travelled right down the Goldfields pipeline interviewing the then staff.
MT	You're not talking about Richard Hartley.
JP	No, Andrew Gill.
MT	Right.
JP	It was never put in published form, but I think it provided a lot of [material]. Richard was a lot later.
MT	Right.
JP	Somewhere or other I've got his report. It was never published, though the cost was paying Andrew to do that work. Can I go back to the committee? I've left out Tony Moulds.
MT	Oh yes, was he there at the beginning?
JP	Well, we didn't really have anybody from the Water Authority, but I knew Tony quite well. He's another engineer from England who in the total Water Authority structure was the only one that showed any interest in history, the same as Lloyd Margetts at Main Roads.
MT	Yes
JP	When Brian Burke was in office, he was pressing ahead with the privatisation of the Mint. This included getting rid of the mint, not entirely, but the gold-pouring room. He wanted to get machinery in to reproduce the nugget that now sells internationally. The National Trust Ron Bodycoat was doing a history of the mint at that time because it was being threatened. He went along, looked at the limestone façade to the mint and said that needs to be preserved but nothing else. Now inside is the gold-pouring room.
MT	It's a tourist attraction, you go in there and you watch gold pouring.
JP	The point was that what we had was the original structure that had operated for a hundred-odd years. Look at Kalgoorlie and what it meant to Western Australia. Western Australia is what it is today because of Kalgoorlie and the people that went there and their sort of optimistic view on things, just around the corner there's another gold nugget and all this sort of stuff. Is still prevails in my humble opinion. The [gold pouring] room still had the [original] equipment and personnel [working] with clipped trousers and shirts, clipped in at the elbow, manually pouring the gold into the bars. We were astonished. We had a meeting with the government, Tony Moulds and I, with the Heritage Committee because there was no Heritage Act to get the room preserved; and as a last resort my other daughter was a journalist for the West Australian. She got a photographer and they went down there and photographed the inside of the original gold-pouring room. Those photographs would still be available in the archives at the West Australian. Anyway, we didn't succeed, which was one of our most significant failures because of the connection to all the people that risked life, limb and fortune to go to Kalgoorlie. Even to come to Western Australia in the first place. There's probably no other room in the world that's had anything like the value go through it than that gold-pouring room in central Perth. As a tourist attraction it was unequalled. The main point was it was original. What you've got now!
MT	Is a copy, yes.

JP	I understand that when you manually pour gold, there is an effervescent that escapes. I think they did extractions around the whole room. The recovered gold was worth a lot of money.
MT	They tell that story when you go there.
JP	If you talk to Tony Moulds, that was our most significant failure because it tied in to so much of West Australian history.
MT	So Jim, you were the Chair of the Committee for about ten years?
JP	Oh, not for ten years, about six or seven.
MT	Who was the Chair after you?
JP	Tony Moulds.
MT	The earliest [minutes] I've got is February nineteen ninety four. These minutes have Bruce James as the Chairman. So it was probably yourself, then Tony Moulds, then Bruce James. Do you think there might have been somebody else who was Chair?
JP	Yes, that's the way it would go. [In the beginning] Bruce was primarily focussed on the SEC and he didn't have very much to do with the Institution in Perth.
MT	But later on he did
JP	When he retired, he did yes. And he's the only engineer that's actually managed to get on to the Heritage Council. I tried a few times, but they didn't like the look of me and so I never managed it. It's very political actually. But I had a lot to do with the first director of the Heritage Council Ian Baxter who was an architect. He set it up quite well. We'll talk about him later.
MT	In the State Library they have the minutes from ninety four through to two thousand but there are no others. I started in about two thousand and ten and I've got all the minutes from when I joined, so we've got a gap also from about two thousand through to two thousand and ten. When I first joined you were still a member of the Committee.
JP	Oh look I was a member of the Committee up until a few years ago. I had a continuing interest
MT	This whole period through to two thousand it's got Bruce James as the Chairperson, he was the Chair for at least ten years. I must ask Bruce James who was the Chair after him. I remember when I first arrived Don Young was the Chair. As to the Chair before Don, I can ask Don Young, can't I?
JP	Don Young was appointed to the Board of the Water Corporation. He took an interest in the Goldfields pipeline and he was instrumental in getting Richard Hartley to write River of Steel. I think anybody associated with Richard Hartley couldn't help but get the disease whatever you like to call it.
MT	Enthusiasm.
JPof Heritage. Don came on board as did Harold Hunt of course.
MT	Harold was a member of the Committee for a while was he?
JP	Oh gosh for years. Harold was a member of the Committee when he died.
MT	He must have been a member before ninety four because he's not mentioned as a member in ninety four.
JP	When did Harold die?
MT	I'm not sure.

JP	He was there when Don Young was Chairman.
MT	OK. It must have been in early two thousand then. I have a gap between two thousand and two thousand and ten.
JP	I remember Harold saying to me I'm going to have an operation, but then he died three days after the operation. Harold was a very significant member of the Committee
MT	So we'll keep looking for the other minutes.
JP	You mentioned you had them from ninety four to two thousand
MT	Yes. They're in the State Library. They're the only ones that are in the State Library.
JP	I had a stack having been on the Committee for so long, but they were binned a few years ago.
MT	Oh well, I am not giving up hope yet. Lloyd has promised to have a look through his material to see what he's got.
JP	I'd like to say something about the [heritage] approach. Being a registered consultant with the Heritage Council, they would come to me and I prepared Conservation and Management plans. The only way you could conserve engineering structures, because of their lack of aesthetics, would be to get them on to the Heritage Council list. I did about thirty conservation management plans. I did the Maylands Brick Works. That was listed. I did the Donnelly River Mill. That was listed. While doing that I was able to interview the original engineer who designed the Mill. Have you been to the Donnelly Mill?
MT	I haven't myself, but the Committee has talked about it. We've got photographs of it.
JP	Fascinating. Remember the Karri log in Kings Park, that came from Donnelly. You go into Donnelly River Mill and there were eight saw benches right across. Took me a while to get under the floor.
MT	All the connecting machinery is under the floor?
JP	Talk about Heath Robinson. You had one Robey steam engine, which I understand came from a pumping station on the Murray River, that's where Bunnings got it from. All the wheels and drives and mechanical stuff, everything was mechanical. It's quite unique.
MT	Yes
JP	I spoke about the Goldfields attitude. When I was at Serpentine, the Jarrahdale Mill was still working. The Serpentine was day-labour job and I employed a lot of ex-mill employees, it was still a working mill. I started the job by going into the Murray Arms Hotel, terrible track, you almost couldn't use it in winter, I sat down and saw a couple of guys there having a beer, I said would you like a job? They said yes. I said I'm looking for a drilling crew to operate a drill for site investigation and they said yes. They became the first drilling crew on the job. One of the guys had a few marriage problems, he didn't last long, but the other one stayed with us for years, he was a real bushman, we brought him eventually up to foreman level. The ingenuity of these guys, they could do anything, they could drive any bit of machinery. We were having trouble logging out the bottom of the river because it was so wet, the dozers were just bogged down. We found an old steam big-wheelI think another one is in the museum out there.....we got it tested and we got an operator to work it. We used that to go

	down into the riverbed. It was the only thing with the big wheels that wouldn't bog down to log out the timber from the bottom. These guys from the Mill, there was never anything a trouble to them.
MT	Very used to getting on with it
JP	At the time I was an officer in the Citizen Military Forces in the corps of electrical/mechanical engineers. Officer in charge of engineering with the 10 th Light Horse Regiment of all things, being a civil engineer that was the right place for me. The Rottnest Island Authority knew that, and they asked me to look at the Oliver Hill battery. So I did the conservation management plan which got it on to the Heritage List. I did the Boulder subway on the Goldfields. I don't know whether you've ever been to Boulder.
MT	You have the railway station building there. That's now the tourist building.
JP	Have you looked at the subway?
MT	You can still drive through it.
JP	Very architectural arches. I think there were something like eleven railway lines over it plus a road. It was the busiest!
MT	One of the busiest spots in Australia
JP	That's right. Gateway to the Golden Mile. I got that listed. I did the conservation management plan a bridge over the Gascoyne River at Carnarvon. I did a convict bridge at Greenough. I did the Clackline Bridge, got that listed. I did a bridge over the Blackwood. These were all conservation management plans. Got that listed. I mentioned the history of the Perth trams. The only thing we got out of that, I don't know whether you've noticed going down Stirling Highway, there are three sets of trolley bus poles with graphical art hanging off them. They've got the original globes that could only be obtained from the United States. They depicted Catalinas, they depicted trams, they depicted yachts and all that sort of stuff. If you drive down Stirling Highway they're well-spaced apart from Claremont to Nedlands.
MT	Right, I'll look for them.
JP	Toodyay Bridge
MT	That's the one on the north end of town
JP	Yep. I did the Goods Sheds at Guildford. I did the Goods Shed at Claremont, that's now being restored.
MT	It's now a community centre.
JP	I did that for the Claremont Council. I did a house down there for Hank De Jong, it had a significant history. I did the Observation Tower at Rottnest. I did the Causeway bridges for the Main Roads Department.
MT	What Observation Tower at Rottnest are we talking about?
JP	Well there are two guns on the hill, the Observation Tower is next to the lighthouse.
MT	Oh yes, there's a range-finding observation building.
JP	It was quite tall because[when the guns] went in in nineteen thirty five, radar wasn't there. At the time [tracking was by] direct observation.
MT	Range-finders.
JP	Range-finders were remarkable. They could get the speed of the ship. They could get the vertical and horizontal angles to the ship plus the speed. They had

	it all fed down electrically into an underground room and the report I did has got photos of a mechanical computer. That set out the guns. All the gun operators had to do was set two dials and fire.
MT	Yeah
JP	I dealt with Gill Marsh regarding the Causeway Bridges because they were threatening to take off the concrete handrails.
MT	Can I ask you something else? The other one that's top of the issues at the moment is East Perth Power Station. I've seen where there's this big A3 size set of pictures and stories about the East Perth Power Station. Was that part of the committee's work at any time while you were there?

Note: Have since discovered that the A3 pictures and story of East Perth Power Station were prepared by John Archer in 1982 as an entry for the O. F. Blakey memorial prize. In 2019 John Archer joined the Engineering Heritage WA Committee.

JP	Bruce James, the State Engineering Commission engineer, was taking a big interest in it. I've been down there several times and inspected it. Bruce had been lobbying over the years with the powers that be but he hasn't got anywhere with it.
MT	Well, they've now committed to spent thirty million to get the switchyard and some gas pipeline out and then there'll be developers come in. Did the committee do a conservation and management plan on the East Perth Station?
JP	I think I might have.
MT	So these conservation management plans, they all went into the Heritage Council and they're all in their systems.
JP	They're all on the State Heritage List. Before I move off the East Perth Power Station, the first power stations that powered up Perth were all local authority power stations.
MT	The private tramways first.
JP	In nineteen seventeen the then state government, the Premier was Daglish, he shut down the local government power stations and built one central one at East Perth. They brought in Merz from the UK and they designed the East Perth Power Stations. It was the first central power station. The next one of course was the one in Victoria that Sir John Monash did when he came back from the First World War.
MT	It's worrying that there's still so much equipment in there. Owen Peake from Victoria made a comment that probably the most important power station in Australia from a heritage point of view is East Perth.
JP	That's right. It was the first one to centralise power generation for a big city.
MT	In the whole of Australia?
JP	I had a personal interest in that when I was working with Structural Engineering, they were installing what they called the fourth boiler. I did the structural work for the fourth boiler at the East Perth Power Station.
MT	Right
JP	I also did the conservation management plan for the grain silos at Bunbury and they were against the very strong opposition of the mayor Dr Minera. It was done on the basis that they could be adapted. First one that came at me was that the foundations were inadequate. I managed to go back to them and disprove

	that. The next one was that it was subject to concrete cancer and it would collapse. I came back to them that the walls were so thick that they could carry any load.
MT	From my memory, it's the first slip forming in West Australia?
JP	The majority of the bulk wheat used to go through Bunbury. Bagged wheat used to go through Fremantle.
MT	Yeah
JP	It used to spill all over the wharf. They slip-formed the silos. They were the first silos, before the ones at North Fremantle etcetera. Built by the company that built a lot of the UWA buildings. [The contractors name was R. T. Brine & Co.] The point about it was that you only do a conservation management plan if you've got the approval of the owner
MT	Yes
JP	Getting back to architecture, this business of deciding somebody's home has got significance because of some form of architecture is nonsense. If you're going to preserve somebody's asset in the home, it's got to be very good reasons before you override their wishes.
MT	It's a topical issue here in Peppermint Grove, isn't it?
JP	The Burra Charter is not being followed.
MT	It's like the issue down at Esperance with the Esperance jetty. If the Council had followed the Burra Charter at the beginning, they would have saved themselves so much headache.
JP	The final decision is made by the councillors, not one of whom in most instances has got any idea about the Burra Charter.
MT	Yeah
JP	All I'm saying is, I would like to think that the committee could also get back to getting somebody on the committee who could be registered by the Heritage Council to carry out conservation management plans for engineering structures or sites.
MT	We have a couple of people [on the Committee] who have potential for doing that. In Engineers Australia, heritage and conservation have been added to the areas [of expertise] in which you can become chartered.
JP	Because of professional liability insurance, they are always assessing structures according to today's codes. There are ways around codes with a properly trained structural engineer. Its particularly important that you keep structural engineers who haven't got any heritage background away from assessing heritage potential structures. Another one I did for the Heritage Council was the Cottesloe Colonial Sugar Refinery. Sarich bought the land and the Heritage Council weren't aware that sugar was being phased out. The sugar refinery was at risk, so they called me in at a very late stage to do the conservation management plan on the Sugar Refinery which I did with Baxter, the CEO of the Heritage Council. Absolutely fascinating. The land had been sold and we had meetings, not with Sarich himself, but with his staff. Ian Baxter and myself [wanted] to take some of the gear, which was beautiful stainless steel vacuum ...to refine sugar you can't heat it, the only way you can refine it is putting it into a vacuum. As you know everything boils a lot sooner. It was still operating as a sugar mill when I was talking to all the Colonial Sugar guys

	down there. They were in despair over the whole thing going. But we couldn't get Sarich's organisation to do a blessed thing about having some presentation there [showing] what was here before, those beautiful pieces of stainless steel equipment could have easily been positioned on what they've got on the foreshore there. All they've preserved is a railway weighbridge [that was used to] weigh the raw sugar. I've no doubt bored you stiff.
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Colonial Sugar Refinery, McCabe Street, Mosman Park is Heritage Council Place 03373

Further information on the weighbridge is included in the Town of Mosman Park – Municipal Inventory of Heritage Places, Place 17, <https://www.mosmanpark.wa.gov.au/library/file/Services/Planning/ToMP%20M%20Review%20%20-%20Final%20-%20August%202014.pdf>

MT	Not at all. We have picked up a lot of information and also in particular what's key activities. I will be conveying this to the committee. Some of the things that were important in the past, we need to think about those and possibly brought back into our program. You've only got so much resource in the committee, you've really got to prioritise what you do to make sure you're doing the most important things.
JP	That's why I we got into conservation management plans. Denis Cumming and I decided that was the way to go. It's a tremendous amount of effort that goes into the plaquing program what with approval at national level. That's important in signifying to the public what was there, but if you're going to retain something the first thing to do is to get it listed on the State Heritage. And if you know the Burra Charter, you can.
MT	Yes
JP	When I was Chairman we had a visit from the president of the American Society of Civil Engineers who was interested in heritage and we got him to address us at another one of the evening meetings on the United States' heritage programs. Another one we got was in charge of the British Heritage Council, what's his name...Cones or Coombs [may be Sir Neil Cossons]. I've got his signed book in there. He came and addressed us. He was the one that restored Iron Bridge, the start of the Industrial Revolution. He became the Chair of the Science Museum in London and then when I last heard of him, he'd been Knighted and become Chairman of the British Heritage Council. I've got his book which was adapting engineeringyou can't conserve something unless you can give it a purpose.

Reference is to Sir Neil Cossons, author of the book 'The BP Book of Industrial Archaeology'.

MT	I should make sure we have that reference. There was one other area I would like to ask you about. The Oral History program that included Clough and Lewis and a few others. Did that start in Western Australia or did the Oral History Program idea start somewhere else?
JP	Well, the problem with oral histories was to get people who were trained on how to do an oral history. You've got to get the person doing the oral history to keep focussed.
MT	EHWA has done quite a few oral histories. They're all in the State Library so they're never going to be lost. They have been done in other states of Australia. Doug Ayre was very big on [oral histories] and Richard Hartley did a lot as well. Where did the idea of doing oral histories come from? Did it come from WA or did it come from the eastern states?

JP	Oh no. Oral histories were around somebody being properly trained in oral histories. [Untrained oral histories] were found to be fairly useless.
MT	So it wasn't a particular thing that WA can claim [to have initiated].
JP	Richard Hartley was also a very early member of the committee. You know the history of Richard's [contribution].
MT	Yes, Richard was on the committee in ninety four, so though he was not there at the beginning, it was not long after.
JP	Well Richard came out to Australia to work on the standard gauge railway with Des Sands who I knew quite well. But he had this problem that he eventually died from. So he moved out of engineering and was doing his history course at Murdoch committee and then obviously [became] one of the most valuable members. I mean, the books he's written. Done a book on early history of industry in WA between nineteen twenty and nineteen forty.
MT	He did the one with all the biographies of the mining engineers and Pat Hartley was kind enough to allow me to access his computer. I was able to copy files that were there including his original word documents for some of his books.
JP	He did an autobiography of Brodie-Hall
MT	It's called Brodie. Richard was involved in that was he? It says that the writer of that was Brodie-Hall himself. Richard did it?
JP	Richard did it. Richard launched the book up at a meeting of the National Trust that I attended. I think Brodie had died at that time, yeah Richard wrote that. Another Englishman.
MT	Ah yes Richard another Englishman.
JP	Quite interesting, Bruce James? Know Bruce's history?
MT	Well I know he went through the UWA and then after that he went to England and worked over there for a while, but then he came back.
JP	He was evacuated out of Singapore where his parents were. Have you read Sir Weary Dunlop's diaries?
MT	No
JP	You'll find Bruce's father mentioned in that book. Bruce was evacuated down here with his mother in nineteen forty two. His grandfather was president of the British Electrical Societies of Engineers in the UK. His father was in Singapore. When Bruce came down here in forty two he went to Wesley College, then UWA and then he joined the SEC at Bunbury.
MT	He told me how he did go off to England for a little while straight after he graduated, went across by ship and on through Suez.
JP	Anyway, I've taken up a hell of lot of your time.
MT	I've taken up a lot of your time. I'm retired these days as well, so that's alright. We'll close this down and thank you.